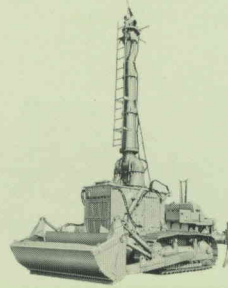
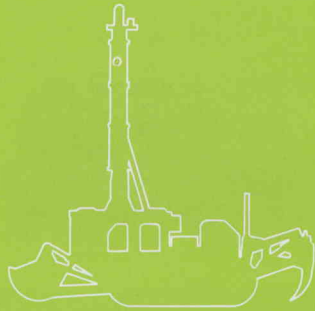


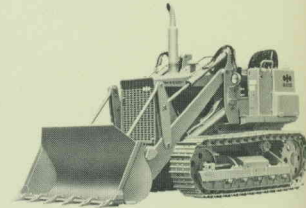
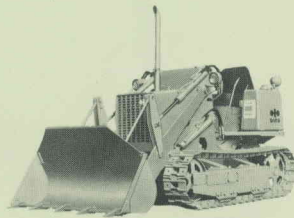
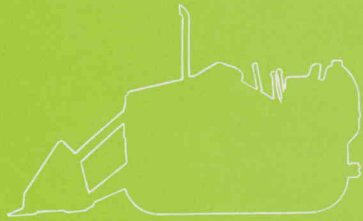
# AMPHIBIOUS BULLDOZER



**D155W**

Operating depth	7 m (23 ft)
Flywheel horsepower	270 HP (199 kW)/2000 RPM
Operating weight: on land in water	43500 kg (85,900 lb) 27900 kg (61,510 lb)
Operating method	Remote radio or wire controlled
Control range	Within a 50 m (164 ft radius)
Dimensions:	
overall length	9305 mm (366.3")
overall width	4000 mm (157.5")
overall height: (mast, vertical)	9760 mm (384.3")
(mast horizontal)	4625 mm (182.1")
length of track on ground	3160 mm (122.4")
track gauge	2140 mm (84.3")
track shoe width	710 mm (28.0")
Dozer equipment:	
width x height	4000 mm x 1250 mm (157.5" x 49.2")
max. lift above ground	1605 mm (63.2")
max. drop below ground	545 mm (21.5")
max. apron opening	1200 mm (47.2")
Ripper equipment	
number of shanks	3
max. digging depth	840 mm (33.1")

# DOZER SHOVELS



**D10S-1**

**D20S-5**

**D21S-5**

Bucket capacity	0.25 m <sup>3</sup> (0.33 cu.yd)	0.4 m <sup>3</sup> (0.5 cu.yd)	0.4 m <sup>3</sup> (0.5 cy.yd)
*Flywheel horsepower	21 HP (15 kW)/2100 RPM	39 HP (29 kW)/2450 RPM	39 HP (29 kW)/2450 RPM
**Operating weight	1940 kg (4,280 lb)	3770 kg (8,310 lb)	3830 kg (8,440 lb)
Engine: Model Piston displacement	KOMATSU 2D94-2B 1.47 ltr (89.7 cu.in)	KOMATSU 4D94-2 2.94 ltr (179 cu.in)	KOMATSU 4D94 2.94 ltr (179 cu.in)
Transmitting system	Direct drive	Direct drive	Hydroshift
No. of track rollers (each side)	4	5	5
Track shoe width	250 mm (9.8") Mono-cast double grouser	300 mm (11.8") Assembled triple grouser	300 mm (11.6") Assembled triple grouser
Length of track on ground	1465 mm (57.7")	1685 mm (66.3")	1685 mm (66.3")
Ground pressure	0.26 kg/cm <sup>2</sup> (3.69 PSI/25.5 kPa)	0.37 kg/cm <sup>2</sup> (5.26 PSI/36.3 kPa)	0.38 kg/cm <sup>2</sup> (5.40 PSI/37.3 kPa)
Track gauge	1060 mm (41.7")	1310 mm (51.6")	1310 mm (51.6")
Static tipping load	1285 kg (2,830 lb/12.6 kN)	2170 kg (4,780 lb/21.2 kN)	2230 kg (4,920 lb/21.9 kN)
Breakout force	1490 kg (3,280 lb/14.6 kN)	3570 kg (7,870 lb/34.9 kN)	3570 kg (7,870 lb/34.9 kN)
Dumping reach	600 mm ( 23.6")	735 mm ( 28.9")	735 mm ( 28.9")
Dumping clearance	1750 mm ( 68.9")	2130 mm ( 83.9")	2130 mm ( 83.9")
Overall dimensions			
height	1980 mm ( 78.0")	2140 mm ( 84.3")	2140 mm ( 84.3")
length	2900 mm (114.2")	3560 mm (140.2")	3560 mm (140.2")
width w/o bucket	1310 mm ( 51.6")	1610 mm ( 63.4")	1610 mm ( 63.4")
bucket width	1580 mm ( 62.2")	1670 mm ( 65.7")	1670 mm ( 65.7")

Travel speed km/h (MPH)  
forward

1st 2.4 (1.5)  
2nd 4.6 (2.9)

1st 2.8 (1.7)  
2nd 4.0 (2.5)  
3rd 7.4 (4.6)

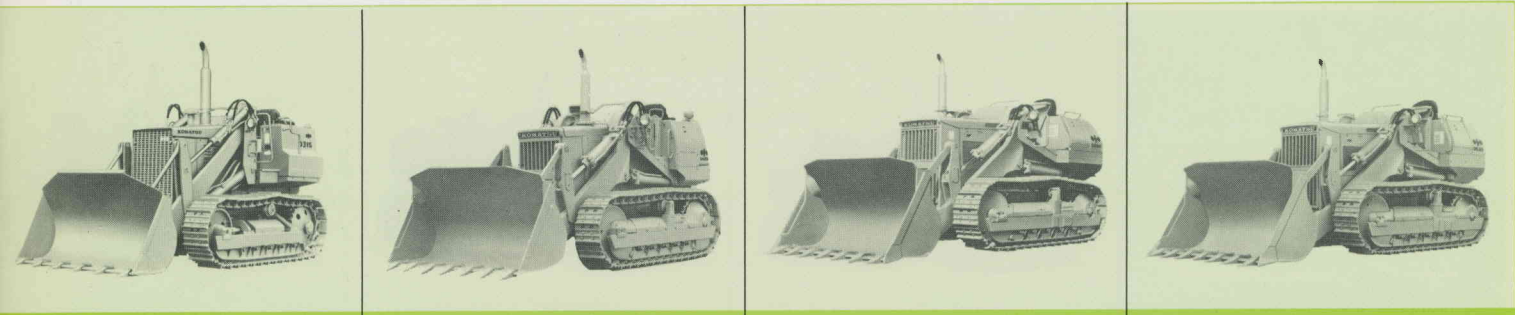
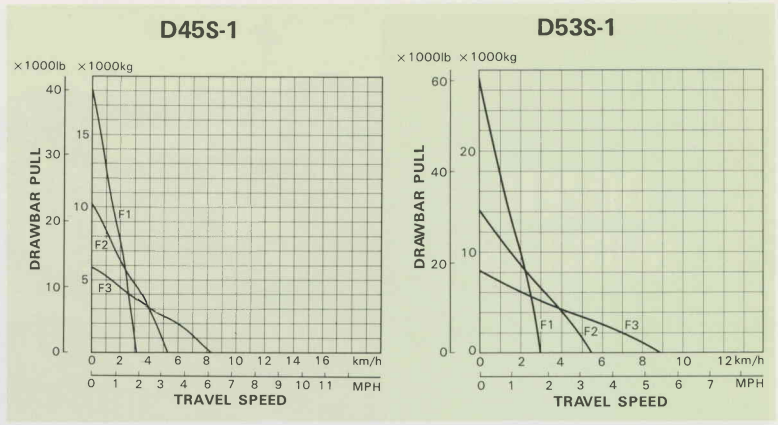
1st 2.6 (1.6)  
2nd 4.4 (2.7)

reverse

1st 4.0 (2.5)

1st 4.5 (2.8)  
2nd 6.5 (4.0)

1st 3.2 (2.0)  
2nd 5.4 (3.4)

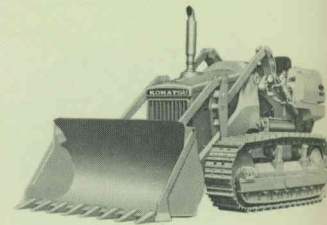
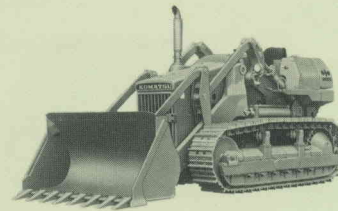
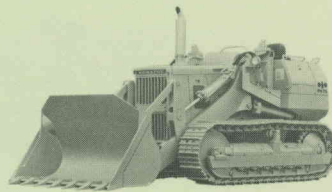
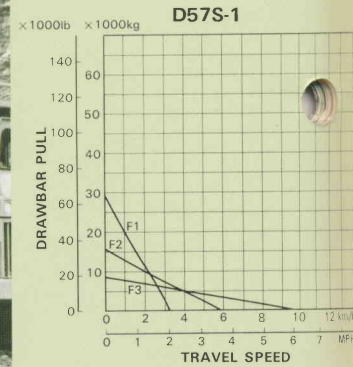


D31S-16	D45S-1	D50S-16	D53S-16
---------	--------	---------	---------

0.8 m <sup>3</sup> (1.0 cu.yd)	1.2 m <sup>3</sup> (1.6 cu.yd)	1.4 m <sup>3</sup> (1.8 cu.yd)	1.4 m <sup>3</sup> (1.8 cu.yd)
63 HP (46 kW)/2350 RPM	90 HP (66 kW)/2400 RPM	110 HP (81 kW)/1900 RPM	110 HP (81 kW)/1900 RPM
6680 kg (14,730 lb)	10940 kg (24,120 lb)	12905 kg (28,450 lb)	13055 kg (28,780 lb)
KOMATSU 4D105-3 4.33 ltr (264 cu.in)	KOMATSU S4D105-3 4.33 ltr (264 cu.in)	KOMATSU 4D130 8.495 ltr (518 cu.in)	KOMATSU 4D130-1 8.495 ltr (518 cu.in)
Hydroshift	TORQFLOW	Direct drive	TORQFLOW
5	5	5	5
330 mm (13.0") Assembled triple grouser	400 mm (15.7") Assembled triple grouser	400 mm (15.7") Assembled triple grouser	400 mm (15.7") Assembled triple grouser
1880 mm (74.0")	2060 mm (81.1")	2200 mm (86.6")	2200 mm (86.6")
0.54 kg/cm <sup>2</sup> (7.68 PSI/53.0 kPa)	0.66 kg/cm <sup>2</sup> (9.39 PSI/64.7 kPa)	0.73 kg/cm <sup>2</sup> (10.38 PSI/71.6 kPa)	0.74 kg/cm <sup>2</sup> (10.52 PSI/72.6 kPa)
1450 mm (57.1")	1540 mm (60.6")	1600 mm (63.0")	1600 mm (63.0")
4150 kg (9,150 lb/40.6 kN)	7270 kg (16,030 lb/71.1 kN)	8290 kg (18,280 lb/81.1 kN)	8320 kg (18,340 lb/81.4 kN)
6400 kg (14,110 lb/62.6 kN)	8720 kg (19,220 lb/85.3 kN)	14800 kg (32,630 lb/144.7 kN)	10480 kg (23,100 lb/102.5 kN)
810 mm ( 31.9")	1030 mm ( 40.6")	1055 mm ( 41.5")	1055 mm ( 41.5")
2545 mm (100.2")	2600 mm (102.4")	2780 mm (109.4")	2780 mm (109.4")
2565 mm (101.0")	2750 mm (108.3")	2840 mm (111.8")	2840 mm (111.8")
4145 mm (163.2")	4910 mm (193.3")	5240 mm (206.3")	5240 mm (206.3")
1790 mm ( 70.5")	1945 mm ( 76.6")	2045 mm ( 80.5")	2045 mm ( 80.5")
1905 mm ( 75.0")	2115 mm ( 83.3")	2130 mm ( 83.9")	2130 mm ( 83.9")

1st 2.2 (1.4) 2nd 3.9 (2.4) 3rd 6.5 (4.0)	1st 0- 3.2 (2.0) 2nd 0- 5.3 (3.3) 3rd 0- 8.2 (5.1)	1st 2.6 (1.6) 2nd 3.7 (2.3) 3rd 5.4 (3.4) 4th 9.1 (5.7)	1st 0- 3.0 (1.9) 2nd 0- 5.4 (3.4) 3rd 0- 8.8 (5.5)
1st 2.4 (1.5) 2nd 4.3 (2.7) 3rd 7.1 (4.4)	1st 0- 3.8 (2.4) 2nd 0- 6.4 (4.0) 3rd 0- 9.9 (6.2)	1st 3.5 (2.2) 2nd 5.5 (3.4) 3rd 7.9 (4.9)	1st 0- 3.6 (2.2) 2nd 0- 6.5 (4.0) 3rd 0-10.4 (6.5)

# DOZER SHOVELS



**D57S-1**

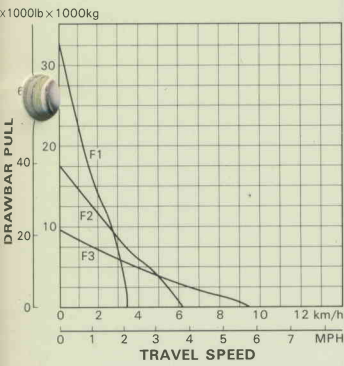
**D60S-6**

**D65S-6**

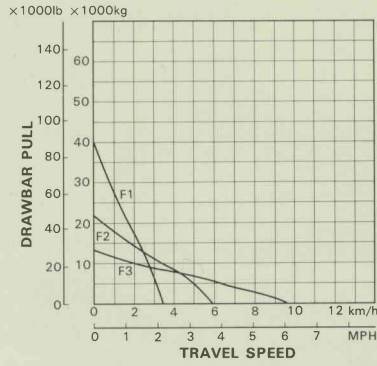
Bucket capacity	1.6 m <sup>3</sup> (2.1 cu.yd)	1.8 m <sup>3</sup> (2.4 cu.yd)	1.8 m <sup>3</sup> (2.4 cu.yd)
* Flywheel horsepower	135 HP (99 kW)/1900 RPM	140 HP (103 kW)/1600 RPM	160 HP (118 kW)/1850 RPM
** Operating weight	14630 kg (32,260 lb)	17650 kg (38,910 lb)	17950 kg (39,570 lb)
Engine: Model Piston displacement	KOMATSU S4D130-1 8.495 ltr (518 cu.in)	KOMATSU-CUMMINS NH220-CI 12.17 ltr (743 cu.in)	KOMATSU-CUMMINS NH220-CI 12.17 ltr (743 cu.in)
Transmitting system	TORQFLOW	Direct drive	TORQFLOW
No. of track rollers (each side)	6	6	6
Track shoe width	400 mm (15.7") Assembled triple grouser	460 mm (18.1") Assembled triple grouser	460 mm (18.1") Assembled triple grouser
Length of track on ground	2425 mm ( 95.5")	2635 mm (103.7")	2635 mm (103.7")
Ground pressure	0.76 kg/cm <sup>2</sup> (10.81 PSI/74.5 kPa)	0.73 kg/cm <sup>2</sup> (10.38 PSI/71.6 kPa)	0.74 kg/cm <sup>2</sup> (10.53 PSI/72.6 kPa)
Track gauge	1700 mm ( 66.9")	1880 mm ( 74.0")	1880 mm ( 74.0")
Static tipping load	9420 kg (20,770 lb/92.1 kN)	10800 kg (23,810 lb/105.6 kN)	11300 kg (24,910 lb/110.5 kN)
Breakout force	11800 kg (26,010 lb/115.4 kN)	13300 kg (39,320 lb/130.3 kN)	14020 kg (30,910 lb/137.1 kN)
Dumping reach	1190 mm ( 46.9")	1270 mm ( 50.0")	1270 mm ( 50.0")
Dumping clearance	2890 mm (113.8")	2730 mm (107.5")	2730 mm (107.5")
Overall dimensions			
height	2925 mm (115.2")	2990 mm (117.7")	2990 mm (117.7")
length	5470 mm (215.4")	5790 mm (228.0")	5790 mm (228.0")
width w/o bucket	2145 mm ( 84.4")	2355 mm ( 92.7")	2355 mm ( 92.7")
bucket width	2290 mm ( 90.2")	2497 mm ( 98.3")	2497 mm ( 98.3")

Travel speed km/h (MPH)			
forward	1st 0- 3.1 (1.9) 2nd 0- 5.7 (3.5) 3rd 0- 9.5 (5.9)	1st 2.5 (1.6) 4th 8.5 (5.3) 2nd 4.0 (2.5) 5th 11.1 (6.9) 3rd 5.9 (3.7)	1st 0- 3.4 (2.1) 2nd 0- 6.1 (3.8) 3rd 0- 9.8 (6.1)
reverse	1st 0- 3.8 (2.4) 2nd 0- 6.9 (4.3) 3rd 0-11.5 (7.1)	1st 3.2 (2.0) 2nd 5.1 (3.2) 3rd 7.7 (4.8) 4th 11.1 (6.9)	1st 0- 4.5 (2.8) 2nd 0- 7.6 (4.7) 3rd 0-12.2 (7.6)

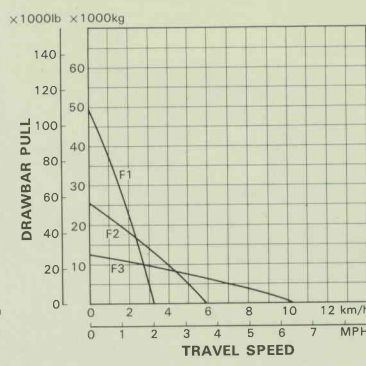
### D65S-6



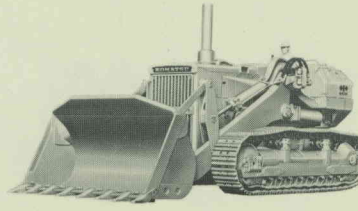
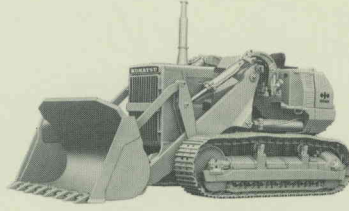
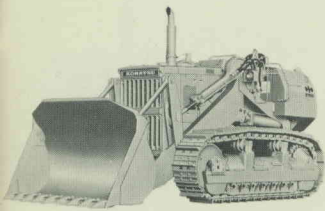
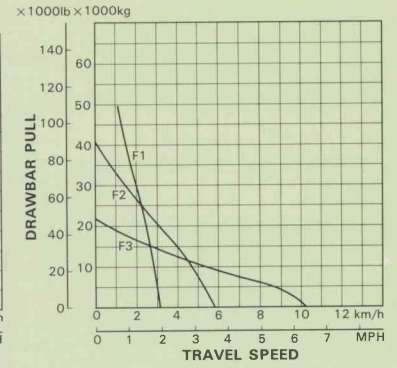
### D75S-3



### D95S-1



### D155S-1



#### D75S-3

#### D95S-1

#### D155S-1

2.2 m <sup>3</sup> (2.9 cu.yd)	3.2 m <sup>3</sup> (4.2 cu.yd)	4.5 m <sup>3</sup> (5.9 cu.yd)
200 HP (147 kW)/2000 RPM	245 HP (180 kW)/1850 RPM	350 HP (257 kW)/2000 RPM
20790 kg (45,830 lb)	29800 kg (65,700 lb)	41800 kg (92,150 lb)
KOMATSU-CUMMINS NTO-6-CI 12.7 ltr (743 cu.in)	KOMATSU-CUMMINS NT855 14.01 ltr (855 cu.in)	KOMATSU S6D155-4E 19.26 ltr (1,175 cu.in)
TORQFLOW	TORQFLOW	TORQFLOW
7	7	8
460 mm (18.1") Assembled triple grouser	510 mm (20.1") Assembled triple grouser	560 mm (22.1") Assembled triple grouser
2735 mm (107.7")	3050 mm (120.1")	3620 mm (142.5")
0.82 kg/cm <sup>2</sup> (11.66 PSI/80.4 kPa)	0.96 kg/cm <sup>2</sup> (13.7 PSI/94.1 kPa)	1.03 kg/cm <sup>2</sup> (14.65 PSI/101.0 kPa)
1950 mm ( 76.8")	2250 mm ( 88.6")	2380 mm ( 93.7")
14000 kg (30,680 lb/136.9 kN)	19960 kg (43,340 lb/195.2 kN)	28200 kg (62,170 lb/275.8 kN)
16880 kg (37,210 lb/165.1 kN)	22700 kg (50,040 lb/222.0 kN)	25200 kg (55,560 lb/246.5 kN)
1280 mm ( 50.4")	1430 mm ( 56.3")	1555 mm ( 61.2")
3200 mm (126.0")	3060 mm (120.5")	3695 mm (145.5")
3225 mm (127.0")	3665 mm (144.3")	3875 mm (152.6")
6065 mm (238.8")	6330 mm (249.2")	7730 mm (304.3")
2500 mm ( 98.4")	2850 mm (112.2")	3020 mm (118.9")
2500 mm ( 98.4")	2942 mm (115.8")	3150 mm (124.0")

1st 0- 3.3 (2.0)  
2nd 0- 5.8 (3.6)  
3rd 0- 9.6 (6.0)

1st 3.2 (2.0)  
2nd 5.8 (3.6)  
3rd 10.1 (6.3)

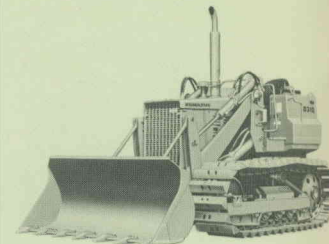
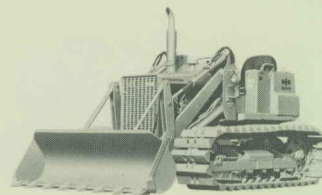
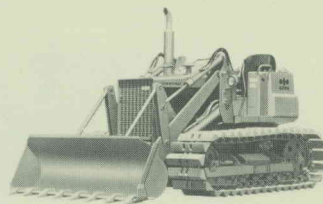
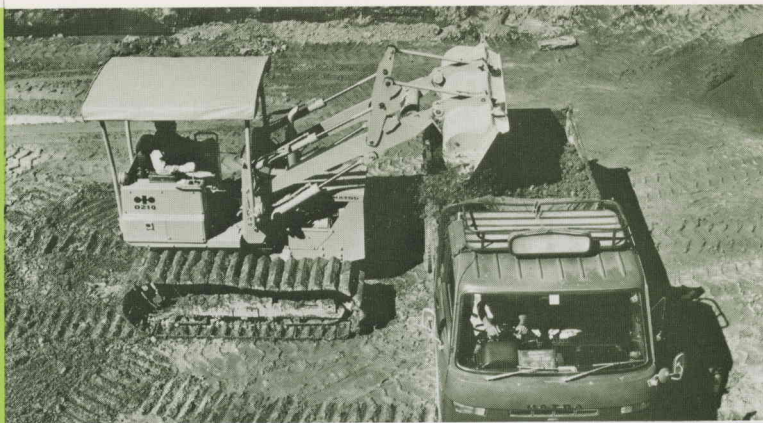
1st 0- 3.2 (2.0)  
2nd 0- 5.9 (3.7)  
3rd 0-10.2 (6.3)

1st 0- 4.3 (2.7)  
2nd 0- 7.5 (4.7)  
3rd 0-12.1 (7.5)

1st 3.8 (2.4)  
2nd 6.9 (4.3)  
3rd 11.9 (7.4)

1st 0- 3.9 (2.4)  
2nd 0- 7.1 (4.4)  
3rd 0-12.1 (7.5)

# SWAMP DOZER SHOVELS



**D20Q-5**

**D21Q-5**

**D31Q-16**

Bucket capacity	0.4 m <sup>3</sup> (0.5 cu.yd)	0.4 m <sup>3</sup> (0.5 cu.yd)	0.8 m <sup>3</sup> (1.0 cu.yd)
*Flywheel horsepower	39 HP (29 kW)/2450 RPM	39 HP (29 kW)/2450 RPM	63 HP (46 kW)/2350 RPM
**Operating weight	4080 kg (8,990 lb)	4140 kg (9,130 lb)	7050 kg (15,540 lb)
Engine: Model Piston displacement	KOMATSU 4D94-2N 2.94 ltr (179 cu.in)	KOMATSU 4D94-2 2.94 ltr (179 cu.in)	KOMATSU 4D105-3 4.33 ltr (264 cu.in)
Transmitting system	Direct drive	Hydroshift	Hydroshift
No. of track rollers (each side)	5	5	5
Track shoe width	510 mm (20.1") Assembled swamp shoe	510 mm (20.1") Assembled swamp shoe	600 mm (24.0") Assembled swamp shoe
Length of track on ground	1685 mm (66.3")	1685 mm (66.3")	1880 mm (74.0")
Ground pressure	0.24 kg/cm <sup>2</sup> (3.41 PSI/23.5 kPa)	0.24 kg/cm <sup>2</sup> (3.41 PSI/23.5 kPa)	0.31 kg/cm <sup>2</sup> (4.41 PSI/30.4 kPa)
Track gauge	1490 mm ( 58.7")	1490 mm ( 58.7")	1650 mm ( 65.0")
Static tipping load	2340 kg (5,160 lb/22.9 kN)	2480 kg (5,470 lb/24.3 kN)	4360 kg (9,610 lb/42.6 kN)
Breakout force	4060 kg (8,950 lb/39.7 kN)	4060 kg (8,950 lb/39.7 kN)	6800 kg (14,990 lb/66.5 kN)
Dumping reach	660 mm ( 26.0")	660 mm ( 26.0")	750 mm ( 29.5")
Dumping clearance	2235 mm ( 88.0")	2235 mm ( 88.0")	2645 mm (104.1")
Overall dimensions			
height	2185 mm ( 86.0")	2185 mm ( 86.0")	2620 mm (103.1")
length	3445 mm (135.6")	3445 mm (135.6")	4045 mm (159.3")
width w/o bucket	2000 mm ( 78.7")	2000 mm ( 78.7")	2250 mm ( 88.6")
bucket width	2020 mm ( 79.5")	2020 mm ( 79.5")	2300 mm ( 90.6")

Travel speed km/h (MPH) forward	1st 2.8 (1.7)	1st 2.6 (1.6)	1st 2.2 (1.4)
	2nd 4.0 (2.5)	2nd 4.4 (2.7)	2nd 3.9 (2.4)
	3rd 7.4 (4.6)		3rd 6.5 (4.0)
reverse	1st 4.5 (2.8)	1st 3.2 (2.0)	1st 2.4 (1.5)
	2nd 6.5 (4.0)	2nd 5.9 (3.7)	2nd 4.9 (3.0)
			3rd 7.1 (4.4)